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ABSTRACT

This review of the literature on facilitated communication (FC) with individuals having severe communication disorders focuses on three major issues: (1) the history and development of FC, with varying opinions on the purpose of FC; (2) criteria for selecting individuals as having potential to benefit from FC; and (3) findings and issues surrounding message authorship. First, the conceptual framework and purpose of facilitated communication is reviewed. A lack of agreement on characteristics of appropriate candidates for FC is noted. Questions addressed concerning message authorship include whether to test for authorship validity or not, how to test for authorship, and how to determine who authors a given message. Also reviewed is literature on collateral effects of FC and societal impacts, including ethical issues, benefits, and harmful effects. (Contains 78 references.) (DB)

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Trace Reprint Series

Literature Review from Case Studies on Facilitated Communication

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Case Studies on Facilitated Communication

Literature Review

Current literature was gathered and reviewed throughout the project. The literature review enhanced project staff's understanding of the key issues that would require exploration, and guided the project design and ongoing implementation. Since, at the start of the project, FC had only been introduced in the United States, much of the literature on FC was limited to anecdotal accounts of success, verbatim transcripts produced using FC, or warnings of FC hazards. Until recently much of the literature has been published in newsletters, booklets, or the popular press. However, a current review of the literature reveals many (e.g., more than two dozen) carefully designed studies on FC have been completed and published in a refereed literature.

Several key issues, with varying degrees of clarity and frequency, emerge when reviewing the literature on FC. The bulk of the literature focused on clarifying these three issues related to FC: (a) the history and development of FC with varying opinions on the purpose of FC, (b) the criteria for selecting individuals as having potential to benefit from FC, and (c) findings and issues surrounding message authorship. With less clarity and frequency, the literature contains references to changes in behavior or function when using FC, and perceptions of direct or indirect societal repercussions stemming from FC. Speculation regarding the effects of FC on society that are identified in the literature relate to ethical questions, the tendency to devalue people with severe disabilities, concerns about the effects of labeling, and reflections on the treatment needs of those with severe disabilities. Lastly, only hints about the social psychological or intra-psychic implications of FC were found in the literature. However, it appeared to project developers that psychological processes such as group dynamics may be salient variables, since the treatment of those with severe disabilities usually involves a team approach (Biklen, Morton, Gold, Berrigan, & Swaminathan (1992).

Conceptual Framework of Facilitated Communication:

The historical roots of FC seemingly can be found within many professional disciplines and developed along divergent tracks. First, the use of hand over hand assistance to facilitate motor output is often (see for example Biklen et al., 1992) traced to Oppenheim (1974). Oppenheim provided hand-over-hand support to individuals who had autism in order to facilitate their ability to write with common writing instruments; she viewed this method as a training method with the ultimate objective of fading support. Similarly, Crossley and McDonald (1984) provided hand or arm support to individuals having cerebral palsy, during the 1970's and 1980's, with the goal of achieving more controlled movements and improved accuracy in selecting targets on a symbol display. In the field of physical rehabilitation, approaches applicable to persons with neurological disabilities were described by Aryes (1972), Bobath and Bobath (1964), Rood (1956), and Voss (1972). These neuro-rehabilitation approaches employ sensory stimulation, graded assistance, and increasing expectations to inhibit abnormal motor reactions and facilitate normal movements. Within the same time frame, the field of augmentative and alternative communication developed as technological advances enabled those with severe communication impairments to express their thoughts and ideas to others (e.g., McNaughton, 1990; Shane, 1986; Vanderheiden & Lloyd, 1986). In education, facilitative communication was viewed as a method of empathically interacting with

students to enhance their social and academic functioning (Hetrick, 1979; Long, Paradise, & Coleman, 1978). And finally, the development of FC may stem from a trend toward normalization in community settings for those with disabilities (Wolfensberger & Tullman, 1991). Calculator (1992) submitted that "stripped of its notoriety, facilitated communication may be found to consist of nothing more than a repackaging of earlier principles ... applying an eclectic set of techniques" (p. 19).

In summary, using physical support and guidance in training, neuro-rehabilitation, alternative or augmentative communication (ACC), empathetic interaction, or environmental normalization are commonly acknowledged and accepted professional practices in educational or therapeutic approaches. However, the widespread discussion and controversy did not occur until aspects of these approaches were combined to "facilitate" typed communication by clients, and the resultant communications were presumed, by some, as authentic communications of the client. Embodied in this controversy are many questions about the purpose of FC, who would benefit from FC, how to interpret the messages produced, and what are the effects of FC on the client and society.

Purpose of Facilitated Communication

There are conflicting ideas about the purpose of FC. Crossley and McDonald (1984), from Australia, are often credited with igniting interest in FC. Crossley's physical support, reportedly, enabled increased accuracy of target selection, and a dramatic improvement in communication skills, including spelling. Crossley and Remington-Gurney (1992) described facilitated communication as "training (which) was developed ... for the purpose of teaching the hand skills needed to use communication aids effectively to individuals whose severe communication impairment is compounded by impaired hand function (p. 29)". Crossley (1990a) stated that "the immediate aim (of FC)... is to allow aid users to make choices and to communicate while they develop their manual skills ... the ultimate goal is for them to be able to access the communication aid(s) of their choice independently " (p. 48). Crossley's writings suggest that FC could be viewed as a training approach to help a person develop independence in the use of augmentative communication.

Biklen (1990) first brought attention to the use of the technique in the United States. He reported success in improving the communication abilities of individuals who have autism, but highlighted a somewhat differing purpose of the facilitative communication approach, as a method of unleashing the natural linguistic and literacy abilities of individuals. (Biklen, 1991). Biklen (1990) noted that "their (referring to persons with severe communication impairments and autism) difficulties with communication appears to be one of praxis rather than cognition ... with facilitation, the person can bypass his or her problems of verbal expression and type natural language" (p. 303). Thus another purpose of the facilitated communication approach could be to release the communication skills that have been dormant in individuals, by circumventing the underlying movement impairment which impedes communication. Although these two author's (Biklen and Crossley) writings are in agreement on most points, there is a substantial difference in the expectations of training technique toward independence advocated by Crossley, and the unleashing of natural linguistic and literacy abilities asserted by Biklen.

These authors, Biklen (1990, 1991, 1992), Crossley (1992a, 1992b), and Crossley and Remington-Gurney (1992), agree that motor deficits impair communication using traditional augmentative communication aids, making the assumption that cognition and language are far more developed than might typically be expected. To support this assumption Crossley and Remington-Gurney reported that 65% of their 430 clients who were labeled intellectually impaired showed adequate literacy to type an intelligible sentence (e.g., "It was hot") without a model whereas only 7.6% of these individuals showed literacy skills before using FC. Biklen (1991) also reported finding unexpected literacy and numeric skills in all 21 students with autism that he studied. However, these

authors evaluated improved functioning as evidenced through communications produced using FC. Furthermore, neither of these authors described assessment measures of literacy capabilities, the criteria for labeling the clients as intellectually impaired or autistic, nor specific motor characteristics of their subjects.

Appropriate Candidates.

In addition to confusion over the purpose of FC, there is little definition or agreement in the literature about who would be an appropriate candidate for FC nor careful description of clients using FC (McLean, 1992). On the one hand, Crossley (1992b) noted that FC is a useful teaching strategy for individuals regardless of etiology who

> "have speech impairments severe enough to require the use of non-speech communication strategies, have neuromotor impairments ... (and) are potential communication aid users for whom independent direct access using their hands is a realistic and desirable goal ... this ... group includes all ambulant individuals labeled as intellectually impaired and/or autistic who have severe communication impairment and who have problems acquiring manual signing or handwriting skills" (p. 16).

Furthermore, Crossley stated that FC is not generally the technique of choice for people with severe motor impairments who most often benefit from other, more independent alternatives for communicating such as scanning or coded systems. However, reports in the popular press (see for e.g. Lavin, 1993) and observation of clients coming to the Trace Center with requests for equipment to use in FC, often are persons with severe physical disabilities.

Several studies have used the diagnosis of autistic disorder as one criteria or descriptor for individuals included in the study of FC (Biklen, 1990, 1991; Biklen, & Schubert, 1991; Biklen et al. 1992; Biklen et al. 1991; Wheeler, Jacobson, Pagliere, & Schwartz, 1993). However, Crossley (1992a, 1992b) does not limit FC to those with autism.

Message Authorship.

Much of the literature focuses on the critical issue of message authorship. Three questions are inherent in this issue. The first and most apparent question addressed in the literature is a determination of who authored the message, but the second, perhaps more fundamental, issue raised is whether it is necessary, or ethical, to test authorship at all. Lastly, there are differing methods of "validation" or authorship testing reported by those addressing this issue.

To Test or Not to Test. Those who argue for avoiding "validation" or authorship testing cite the social norms regarding communication as rationale for avoiding testing. As submitted in the DEAL communication center manuscript (1992), "many aid users have very negative attitudes toward testing ... after all, we are not required to establish our competence every time we open our mouths" (p. 16). Biklen (1992) cautioned users of FC to avoid testing for competency since the emotional support and need to treat the person as competent are basic to successfully facilitating communication. Donnellan et al. (1992) submitted that "it is important to remember that every communicative interaction is a collaborative event ... in ordinary social communication ... partners influence one another's behavior (p. 76). Others reject the idea of validation studies since these introduce doubt and skepticism into a positive approach to communication (Kurtz, 1992) or dismiss skepticism as coming from "professionals" who really don't know the child (Lehr, 1992).

If FC is viewed as a training technique in which facilitators expect to guide clients as they learn to communicate, messages could be perceived as stemming from varying degrees of facilitator influence. However, if messages are viewed as spontaneous and authentic communications stemming solely from the client, then authorship is a salient concern. But if allegations of sexual abuse are made through FC, than determining authorship becomes a legal and ethical matter. Anecdotal allegations of sexual abuse

made through FC communication are reported in the literature, but the prevalence of such allegations has not been reported. Spelman (1992) indicated, the desire or need to establish the authorship of communications has intensified as a result of recent claims of sexual abuse by some individuals using the facilitated communication technique. Rimland (1992a) stated that "...while FC (facilitated communication) has provided a thrilling breakthrough for some families, it has led to disaster for others" (p. 3). Rimland also provided several case examples of families disrupted by sexual abuse claims; these claims were ultimately refuted when validation procedures failed to find evidence that the client could reliable communicate using FC techniques. Jacobson et al. (in press) also cite examples of distress produced in family members and caregivers as a consequence of allegations of sexual or other abuse. Thompson (1993) described a case of one 29 year old woman with severe to profound retardation who reported molestation by her parents through FC; after failing validation measures the courts dismissed the charges. A similar case was described by (Bligh & Kupperman, 1993) in which allegations of sexual abuse during FC by a person diagnosed as legally blind and severely retarded could not be reliably assessed using FC and charges were dismissed by the courts.

Proponents and skeptics of FC are likely to share a common concern about sexual abuse of clients. Allegations of sexual abuse are serious, but the prevalence of this abuse or methods to investigate sexual abuse are not agreed upon. Proponents feel that FC will enhance our understanding of sexual abuse. For example, Haskew and Donnellan (1993) wrote that

> "It has been estimated that sexual abuse for children with disabilities are four to ten times the 25 percent rate for the general population. That means claims Nora Baladerian (1991), that there is better than 100 percent likelihood that a disabled child will be molested before he or she is eighteen. Facilitated Communication is confirming these statistics. We can safely assume that other forms of abuse are at least as commonplace." (p.31)

There seems to be a common belief that sexual abuse rates for those with severe disabilities are high. Some of this belief could be traced to the article by Baladerian (1991). She states that 100% of developmentally disabled females will experience up to 4 incidents of abuse; 99% of perpetrators are known to the victims, 97% of the aggressors are male, and 55% of the assaults are incestual. However in the article by Baladerian (1991), the major source of her information could not be traced through her reference list, since no journal or book source was included. The other two primary sources of her information were not included in the reference list.

How to Test for Authorship Various authors have described methods to validate the messages produced using FC, but no standardized assessment is found. The first method relies on observations of the idiosyncratic aspects of client communication. This method is reported by Biklen et al. (1992) who "noted six factors ... style, speed and accuracy ... is fairly constant across facilitators ... individuals make typographical errors ... phonetic or invented spellings that are unique to them ... individuals type phrases ... produce content that is not known to the facilitators ... (and) reveal their personalities" (pp. 19-20).

Evidence of increasing independence in using augmentative communication, such as fading support from wrist to a light touch on the shoulder, is cited as one potential measure of validating communication (Crossley & Remington-Gurney, 1992), presumably since fading support may mean fading influence. Jacobson et al. (in press) submitted that individuals who progress to apparently productive and independent typing may be the strongest case for FC benefits. However, the prevalence of individuals who progress to independence in AC use has not been reported in the literature.

Calculator and Singer (1992) used the Peabody Picture Vocabulary Test-Revised (PPVT-R) with and without facilitation; the facilitators (who were all unfamiliar with the PPVT-R) wore ear plugs and headphones with binaurally introduced white noise and

looked away from the examiner. Using this combination of stimulus occlusion, Calculator and Singer hoped to eliminate all knowledge of the test questions by the facilitator.

Wheeler et al. (1993) showed clients pictures of familiar objects under 3 conditions: (a) assisted typing with facilitator unaware of the stimulus, (b) unassisted typing, and (c) assisted typing with the facilitator and the client seeing the same or different pictures simultaneously. Other validation procedures have asked the facilitator to look away during the typing or have both client and facilitator wear earphones (Intellectual Disability Review Panel, 1989). In The Queensland Report on Facilitated Communication (1993) validation was obtained in spontaneous communication (during FC) through the analysis of idiosyncratic content, and secondly in pre-planned contexts. In these pre-planned contexts one naive facilitator would discuss information known only to the client and another facilitator; questions were posed in both an open format and multiple choice context.

Recently, Moore and Hudson and their associates used the same method in several studies (Hudson, Melita, & Arnold, 1993; Moore, Donovan, Hudson, Dykstra & Lawrence, 1993; Moore, Donovan, & Hudson, 1993). In this method, the facilitator tape recorded questions that she/he believed could be answered by the client; these questions were then simultaneously heard by both the facilitator and client in conditions of with and without earphones. This technique was used to desensitize the client to headphone testing. Later the same questions were randomly presented to the client alone, while the facilitator heard music through the earphones. In another recent study, authorship was tested using screens and earphones to occlude both visual and auditory input to the facilitator; both personal interview questions and a vocabulary test were then administered (Eberlin, McConnachie, Ibel, & Volpe, 1993).

Who Authors the Messages? Observations during FC, such as idiosyncratic spellings or phrases, are submitted as evidence of client authorship (Biklen et al., 1992). However, many of the anecdotal reports on the benefits of FC do not address the issue of message authorship.

Researchers conducting other studies have concluded that the messages produced using FC were heavily influenced or totally produced by the facilitator (e.g. Bligh & Kupperman, 1993; Eberlin et al., 1993; Hudson et al., 1993; Moore et al., 1993; Moore et al., 1993; Wheeler et al., 1993). In the study by Wheeler et al. (1993) they concluded that "all of these 12 people ... were systematically and unknowingly influenced by their facilitators ... their output was not only influenced, but controlled and determined by the facilitators" (pp. 57-58). Despite their findings, Wheeler and his associates as well as Bligh and Kupperman emphasized that facilitator influence was unintentional and that facilitators were convinced that the messages were authentic. Furthermore, these facilitators were described as committed to and concerned about the well being of their clients. Similarly, in a review of 21 validation studies which controlled for both facilitator influence and avoided treating clients in a demeaning manner, only 3 of the 187 subjects were found to be partially free of facilitator influence (Green, 1992). Jacobson et al. (in press) summarized four studies and also concluded that there was no unexpected literacy and little evidence of valid communication produced when using FC.

From another perspective, there may be a continuum of influence by the facilitator. Calculator and Singer (1992) found that 3 of 5 non-speaking boys between the ages of 6 years 11 months and 16 years 10 months performed at a significantly higher level on the Peabody Picture Vocabulary Test when facilitated by an individual who's hearing of test questions was occluded. (Note: these three boys were included in the report by Green, 1992) However, this is the only recent study that reported empirical evidence of client authorship and in this instance, the communication task required pointing to one of four pictures rather than producing complicated language.

A third source of message authorship is reported to come through a process of "sending" or a sixth sense. Bray (1992) wrote "a number of facilitators have reported

phenomena which do not appear to 'fit' guiding or cueing ... (but) are consistent with a communicator's ability to receive a particular message through ... 'telepathy' " (pp. 7-8). Similarly, Haskew and Donnellan (1993) indicated that a sixth sense allows others to read the minds of individuals. Haskew and Donnellan theorize that all people may have this sixth sense at birth, but it fades as speech and locomotion develop. These authors support their belief in the sixth sense with suggesting that there is scientific literature to describe this process, but no specific citations to a sixth sense or telepathy are referenced in their booklet.

Collateral Effects of FC

When examining the issues pertaining to FC, often the focus is on the authorship of messages produced in conjunction with FC. In examining FC, it is also important to consider other changes or effects that might occur in conjunction with using FC. These other effects could be termed "collateral" (Calculator, 1993 in consultation to project suggested this term). Effects might be observed in response to the training, close relationship, attention, high expectations, or other aspects of FC. Although only superficially explored in the literature, collateral effects in motor abilities, behavior, communication abilities, and quality of life are described.

Crossley and Remington-Gurney (1992), and Hill and Leary (1993) described the physical impairments which may underlie the need for FC. These impairments include poor eye-hand coordination, abnormalities in muscle tone, index finger isolation and extension problems, perseveration, using both hands when a task only requires the use of one, involuntary motions, dyskinesias, tremor, radial/ulnar muscle instability, initiation problems, impulsivity, proximal instability, and reduced proprioception. Crossley and Remington-Gurney described how different types of activities or variations on FC could address the deficits described in each of these areas. Biklen (1990) described clients as having apraxia or the inability to motor plan as impairing communication ability. Despite these descriptions, none of this literature reported measures to assess motor skills, or changes in motor ability following FC.

The behavioral characteristics of those using FC have not been systematically investigated, although anecdotal evidence is reported in case studies. Within these case studies behavior is described as inappropriate scratching or aggressive behavior (Crossley, 1992a), slapping self as well as objects and rocking back and forth (Biklen et al. 1992), crying, temper tantrums, aggression, staring, shaking one's head, or pulling others toward an object for attention (Prizant & Schuler, 1987). Following the introduction of FC, the reports of behavioral change are inconsistent. Biklen et al. (1992) reported that " none of the individual's (n= 43 individuals ranging from 3 to 26 years) ritualistic, stereotypical, or unusual behavior have gone away ... all continued to respond to the environment in unusual ways, (but) many of the individuals do seem to be calmer and more in control of their behavior" (pp. 21, 23). In contrast Donnellan et al. (1992) reported that "challenging behaviors, however, have not subsided and, in some ways, have worsened ... such behavioral deterioration is not common but is reported often enough to suggest that for some individuals (and their families and supporters) the experience of facilitation represents a significant trauma ... there is a need for emotional support for these learners (and those who care for and about them)" (pp. 70-71). Shane (1993) suggested that improved attention and focus may result secondarily from FC.

There is little formal assessment of the linguistic capabilities of persons using FC, but the impaired motor skills that are thought to mask communication ability are assumed to also interfere with performance on standardized tests (Queensland Report, 1993). Several authors; however, describe clients as having the general language abilities of people with autism such as singing songs, speaking quickly with poor intelligibility, other echoed speech, pronoun reversals, or word finding problems (Biklen et al., 1992). Biklen (1991) also described related communication difficulties including inattentiveness, problems with social interaction, and lack of responsiveness to external cues. Biklen (1993) found that 67% of competent FC communicators evidenced echolalia. Crossley

and Remington-Gurney (1992) described their 430 clients as having severe communication impairments which would warrant ACC use. Although many of the anecdotal reports include quotes produced during FC which suggest that language abilities are improved over language without FC, there have been no studies which have carefully assessed language before and after FC on measures independent of FC use.

Quality of life, a measure of satisfaction or competency in one's life, is an elusive phenomena to measure, but one which is often cited as a valuable measure of functioning (Roessler, 1990). Authors have reported improved competency for some individuals in classroom functioning (Biklen et al., 1992; Strandt-Conroy & Sabin, 1993). Verbatim transcripts from FC sessions are often reported as evidence of improved life satisfaction, for example, "Before Facilitated Communication my life was colorless, dead. Now it has taken on a colorful glow. Still many shadows, but now I am really alive" (Haskew & Donnellan, 1993, p. 1). These improved competency or expressions of life satisfaction are dependent on FC, and assume spontaneous, client authored messages.

Societal Impact

Ethical: Assessing the potential societal impacts of FC is a difficult, often emotional laden, challenge. Ethical concerns are one common theme found in the literature. From this ethical perspective, an analysis of FC might suggest that the approach is merely an extension of currently acceptable practices in the treatment of those with severe disabilities, (Calculator, 1992). Furthermore, it would seem to be harmful to deny an opportunity to communicate to someone, who might benefit from FC, because of scientific skepticism (Donnellan et al., 1992). Authors such as Prior and Cummins (1992) disagree with these views, submitting that the hallmark of acceptable treatment is that it does not harm others. Ethical principles of first "doing no harm" and second remaining truthful are considered fundamental in helping relationships (Beauchamp & Childress, 1989), but the intepretation and implementation of these principals is a frequent source of professional debate.

Benefits: Both skeptics and proponents seem to share a common concern about the treatment of those with severe disabilities and the effects of labeling. Shane (1993) although critical of FC, writes: "While legitimate communication is not happening, other secondary benefits may be occurring, including ... a strong bond between respondent and facilitator ... (and) an improved perception of others that persons with severe communication impairments are viewed in more positive ways" (p. 13). Similarly Biklen (1993) suggested that the primary benefit of the use of FC may arise from the challenge of our current thinking and improved treatment of those with severe disabilities and communication impairments . Likewise, Donnellan et al. (1992) submitted: "The potential impact of such research (on facilitated communication) ... may challenge current thinking about ... normal linguistic development, ... the role of attunement, ... touch ... quality of life, and service delivery" (p. 79). Despite this common ground, there has not been any study which has attempted to describe the lives of the individuals using FC, nor systematically surveyed the changes in perception of those associated with individuals with severe disabilities.

Because of this potential benefit and changes in perception, the work of Wolfensberger & Tullman (1991) regarding the treatment of those with disabilities is pertinent to discussions of FC. According to these authors, within our culture those with: (a) congenital or physical differences due to disease, age or other bodily impairments, (b) differences in overt behaviors, and (c) differences in ethnic group are likely to be defined as "devalued" people. As such, devalued people are likely to be treated badly with less social status and dignity, may be cast into the role of eternal child, and interaction with them is valued only if it has a "therapeutic" effect, thus reinforcing a "sick" label. Furthermore, the act of labeling someone as "deviant" in itself produces expectations for deviance which in turn increases the likelihood that others will act deviantly to conform to expectations, creating self-fulfilling prophecies (Michener, DeLamater, & Schwartz, 1990).

As Shane (1993) theorized, FC could be conceived as a tool to diminish this devalued perception of persons with severe disabilities. Theoretically, if a person demonstrates age appropriate communication (whether legitimate or not) through FC, their "label" is changed from one of mental retardation to one of physical handicap. As Wolfensberger and Tullman (1991) point out, the label of physical disability carries less stigma than a label of mental retardation. In their analysis of the perceptions of the culture toward devalued groups, those with a physical disability elicited pity, charity and sometimes ridicule from others. However, those with cognitive impairments are additionally perceived as a menace, sick, subhuman, child-like, holy and innocent, and may elicit dread. Consequently the label of retardation is far more "devalued". Furthermore, people express these attitudes toward devalued individuals in their interactions with them, their expectations, the language that is used about and toward devalued individuals, and how physical environments are set up (Wolfensberger & Tullman). Thus it may be safe to say that those with retardation have basically different treatment than those without retardation. Consistent with Wolfensberger & Tullman, who advocate for normalizing the treatment and expectations for those who are devalued, the individual using FC is treated as a capable, competent person (DEAL, 1992). However, Shane warned that the positive changes in treatment and perception from others toward those with disabilities may "evaporate" if the communications were found to be those of the facilitator and not of the client.

Harmful: Prior and Cummins (1992) highlighted the potential negative impact of FC on the family suggesting that parents may feel guilty for neglecting their child's 'true' capacities, or experience resentment when their child will not communicate with them. Green (1992) suggested that FC, as an untested method, may raise false hopes or sabotage an existing, perhaps effective, school program and FC is a time consuming and expensive intervention which creates dependency between the client and facilitator. Several authors (Green; Prior and Cummins; and Spelman, 1992) expressed concern about making choices or decisions with life changing consequences for the individual based on invalidated messages. Crossley (1993), Green, Rimland (1992b), and Shane (1993) all questioned the assumption that literacy develops without training, since this assumption may prevent those with disabilities from receiving a logical scope and sequence of educational training. In summary, these authors feel that FC can be harmful if it prevents an individual from receiving treatment or education that may be effective, or causes family suffering; but none of these authors offer data to document the frequency of such occurrences.

Cummins and Prior (1992) submitted that the greatest potential harm may come from the unquestioning enthusiasm of some supporters of FC since "the spread of the application of facilitated communication to autism seems to have reached the status of a minor epidemic ... in the absence of any empirical validation ... " (p. 332). Furthermore, they stated: "that such expectations (that students are capable of sophisticated communication) would be most easily engendered ... This mixture of expectation and enthusiasm is a volatile combination with which to equip untrained assistants when accountability for outcome is so low" (p. 240). As Green (1992) cautioned a salient ethical issue evolves from "allowing others -- benevolently or not, unwittingly or not -- to impose their wishes and anxieties on vulnerable individuals" (p. 11).

Although unquestioning enthusiasm by proponents of FC is a potential source of abuse, this enthusiasm is logical. McLean (1992) pointed out that the motives of those using FC may be altruistic since new treatments are embraced in domains where little else has been successful. For example, Wheeler et al. (1993) suggested that facilitators sincerely believed that the communications of individuals were legitimate; when the evidence indicated that FC output was controlled by facilitators, these facilitators were shocked and grieved. Furthermore, McLean noted that FC is consistent with the trend toward "empowerment" and normalization of environments for individuals with disabilities and is also supported by the common belief that people with autism have

more competence than can be expressed. Jacobson et al. (in press) submitted that service providers are under new pressures to serve people in the community using more briefly trained individuals. Because of these very real human struggles, it is easy to imagine why a technique like FC is so appealing; it gives the caregiver and client a common bond and dispels damaging labels and stereotypes.

Other Salient Literature

Although there is little literature on the social psychological underpinnings of FC, there may be other social and psychological variables associated with FC that are only hinted at in the current literature. For example, Silliman (1992) theorized that belief in FC may be influenced by cognitive biases and expectations similar to Clever Hans the talking horse. Similarly, Thompson (1993) suggested that self-fulfilling prophecies may have perpetuated a reign of error regarding FC. Secondly, since those with severe disabilities are usually served by a team of care providers (therapists, parents, teachers, job coaches etc.), there is potential for group processes to influence proponents and skeptics of FC toward conformity to group perceptions and attitudes (Myers & Lamm, 1976), toward novel solutions to problems (Nemeth, 1986), or toward irrational solutions to problems (Janis, 1982). A third variable which may be pertinent to our understanding of FC involves the interpretation of the ambiguous information presented by clients who cannot consistently communicate their feelings and needs. In these situations, individuals may form conflicting interpretations of events, try to bestow some order on any communication attempts (Gilovich, 1991), or interpret the other's feelings by projecting one's own feelings (Tesser, 1986). Additionally, some of literature on FC suggests that intra-psychic dynamics are important in understanding FC as a multiple component intervention. For example, the need to trust that the client's literacy abilities will be emerge over time (Biklen, 1992), and the emotional support given to the client (DEAL Communication Center, 1992) are cited as necessary for successful facilitation. Finally, Crossley (1993) suggested that cultural differences influence individuals and groups responses to new strategies such as FC. Although these issues have not been elucidated in the literature on FC, an exploration of the social psychological variables inherent in FC may be fruitfully explored by future authors.

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